



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,794	07/27/2001	Augustus W. Winfield	10007719-1	8821

7590 08/24/2005

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
----------

POPHAM, JEFFREY D

ART UNIT	PAPER NUMBER
----------	--------------

2137

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,794

Applicant(s)

WINFIELD ET AL.

Examiner

Jeffrey D. Popham

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**Remarks**

Claims 13-15 are pending.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talagala (U.S. Patent 6,742,081) in view of Cohen (U.S. Patent 6,658,592) and UCBG (Thomas, "The Ultimate Computer Buyer's Guide", Chapter 14, 1995, pp. 1-6, obtained from <http://library.n0i.net/miscellanea/ul-pcbuy>).

Regarding Claim 13,

Talagala discloses a method, comprising:

Reading a first file and a second file (Column 6, lines 48-62), where the first and second files have been partitioned into a plurality of parts, the parts stored on a plurality of media, and where at least one particular medium contains at least one part of the first file and at least one part of the second file (Column 6, lines 33-47; and Column 8, lines 3-24);

Reading authentication data for the first file and for the second file (Column 6, lines 48-62); and

Determining that the first file is unchanged only if the authentication data for the first and second files indicate that both the first and second files are unchanged (Column 6, lines 48-62);

But does not disclose reading authentication data for the particular medium and determining that the first file is unchanged only if the authentication data for the particular medium indicates that the data on the medium is unchanged or that the storage system is comprised of write-once media.

Cohen, however, discloses reading authentication data for the entire medium and determining that the first file is unchanged only if the authentication data for the particular medium indicates that the data on the medium is unchanged (Column 4, line 50 to Column 5, line 8). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the error detection system of Cohen into the disk array of Talagala in order to provide a means of rapidly performing integrity checks on the data, with minimal interference with a user of the system (Column 2, lines 6-15).

UCBG, however, discloses the use of WORM (write-once, read many) media (Page 5, Paragraphs 6-8). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the write-once media of UCBG into the disk array of Talagala

as modified by Cohen in order to obtain a non-modifiable data storage medium that has a long lifespan, as taught by UCBG.

Regarding Claim 15,

Talagala discloses determining that the first file is unchanged only if the authentication data for each medium containing a part of the first or second files indicate that the medium data is unchanged (Column 5, line 63 to Column 6, line 62). The use of striping with authentication checking via checksums means that the data for this file will be checked on each medium that the stripe is present on, and when used in the combination of Talagala as modified by Cohen and UCBG, each medium is checked for authenticity as well.

2. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Talagala in view of Cohen and UCBG, further in view of Garfinkel (Garfinkel et al., "Practical UNIX and Internet Security", 4/1996, pp. 1-4, obtained from <http://www.unix.org.ua/orelly/networking/puis/index.htm>).

Talagala as modified by Cohen and UCBG does not disclose encryption and decryption.

Garfinkel, however, discloses encryption and decryption (Pages 1-4). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the encryption and decryption methods of

Garfinkel into the disk array of Talagala in order to protect information from unauthorized access.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Popham whose telephone number is (571)-272-7215. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)272-3865. The fax phone

Art Unit: 2137

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER